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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
James Richard Spears et al.

Serial No.: 09/632,530

Filed: August 4, 2000

For: Apparatus and Method for Oxygenating
Wastewater

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§ Group Art Unit: 1724
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§ Examiner: Barry, Chester T.
§
§ Atty. Docket: PA074-US
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Assistant Commissioner
for Patents
Washington, D.C. 20231

CERTIFICATE OF FACSIMILE

37 C.F.R. 1.8

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April 30, 2003

Date

Tamara J. McGovern
Tamara J. McGovern

Dear Sir:

In response to the Office Action dated February 5, 2003, please amend the above-referenced application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings in this application.

Listing of Claims

Claim 1 (currently amended): An apparatus for treating a wastewater comprising:
a gas-enrichment assembly adapted to receive the wastewater and a treatment gas, wherein the gas-enrichment assembly is configured to generate a gas-enriched fluid; and
a delivery assembly coupled to the gas-enrichment assembly for receiving the gas-enriched fluid from the gas-enrichment assembly and in a fluid communication with the wastewater, the delivery assembly expelling the gas-enriched fluid in a substantially bubble-free manner into the wastewater.

Claims 2-29 (withdrawn)

Claim 30 (original): The apparatus of claim 1, wherein the delivery assembly comprises:
a fluid conduit; and
a nozzle coupled to the fluid conduit.

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Claims 31-37 (withdrawn)

Claim 38 (original): The apparatus of claim 30, wherein the nozzle comprises:
a plurality of capillaries, each of the capillaries having an inlet fluidically coupled to the fluid conduit and having an outlet for expelling the gas-enriched fluid.

Claim 39 (original): The apparatus of claim 38, wherein the capillaries have an inner diameter of approximately 150 to 450 microns.

Claim 40 (original): The apparatus of claim 38, wherein the capillaries are grouped into a plurality of capillary bundles.

Claim 41 (original): The apparatus of claim 40, wherein the capillary bundles comprise a bonding material disposed about the capillary bundles.